



**NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF SAFE DRINKING WATER  
TECHNICAL REVIEW FORM**

**CHEMICAL HANDLING AND FEEDING  
(N.J.A.C. 7:10-11.12)**

Water Purveyor \_\_\_\_\_

PWSID# \_\_\_\_\_

Municipality \_\_\_\_\_

Provide the following information for each chemical feed:

(Attach additional copies of this page as necessary).

Type of Chemical Feed <sup>1</sup>				
Specific Chemical Used				
Number of Pumps				
Pump Make and Model Number				
Type of Pump <sup>2</sup>				
Pump Capacity				
Treatment Plant Capacity				
Chemical Dosage (pounds per day)				
Chemical Dosage (gallons per day)				
Final Concentration (parts per million)				
Method of Pump Control <sup>3</sup>				
Purpose of Treatment				

1 - Indicate the type of chemical feed (i.e. lime, prechlorination, caustic soda, etc.).

2 - Indicate the type of chemical feed pump (i.e. diaphragm, volumetric, gravimetric, solution, etc.).

3 - Indicate how the chemical feed pumps are controlled (i.e. flow pacing, residual pacing, etc.).

**General Information**

	YES	NO	N/A
1. For those chemical feeds in treatment facilities which treat multiple sources or whose capacity exceeds 20% of the system capacity, are a minimum of 2 chemical feed pumps provided?		<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>
2. Is the variation in the accuracy of the feed pump less than 5% of the intended dosage?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are there means provided to accurately measure the amount of chemical fed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is each chemical feed protected against back-siphonage via an antisiphon device (including an antisiphon valve to provide a vacuum break) on the chemical feed line and looping of the chemical feed line to a level higher than the highest elevation in the chemical storage tank?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is each chemical feed pump electrically connected to either a well pump or a booster pump?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are chemical feed lines equipped with clean-out connections, easily accessible for repairs and cleaning, protected against damage and freezing, corrosion resistant, as short as possible, and sloped to permit drainage?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Chemical Storage Tanks**

1. Is a minimum of 30 days storage provided for each chemical?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is the capacity of any day tank sufficient to provide at least 8 hours worth of chemical storage at normal operating feed rates?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are means provided to allow for adequate agitation to keep the strength of the chemical solution uniform throughout?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is water which is used for make-up or dilution of chemical feeds introduced through an air gap or other approved method to prevent back siphonage?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Do any direct connections between a chemical storage tank drain and a sanitary sewer line exist?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are all waste liquids or sludge from chemical solution tanks disposed of in accordance with applicable State and Federal laws and regulations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

YES NO N/A

**Dry Feeders**

1. Indicate the type of feeder: ☐ Volumetric ☐ Gravimetric
2. Are the feeders completely enclosed and are adequate means of dust control provided? ☐ YES ☐ NO ☐ N/A
3. Does the solution pot provide effective solution or suspension of the chemical? ☐ YES ☐ NO ☐ N/A
4. Is water which is used for make-up introduced through an air gap or other approved method to prevent back siphonage? ☐ YES ☐ NO ☐ N/A

**Safety Provisions**

1. Are rubber or neoprene gloves and hand washing facilities provided? ☐ YES ☐ NO ☐ N/A
2. Is a safety shower in close proximity to the chemical handling location provided? ☐ YES ☐ NO ☐ N/A
3. Where dry powdered chemicals are handled, are National Institute for Occupational Safety and Health (NIOSH) approved dust respirators provided? ☐ YES ☐ NO ☐ N/A
4. Is a copy of the manufacturer's material safety data sheet for each chemical conspicuously posted at each location where chemicals are handled? ☐ YES ☐ NO ☐ N/A

\*\*\*Submit appropriate engineering plans, specifications, reports, etc. to substantiate your answers. \*\*\*

I hereby certify that answers provided herein are accurate and reflective of the project being considered for approval.

\_\_\_\_\_  
Signature of Engineer  
Professional Engineer's Embossed Seal

\_\_\_\_\_  
Date

\_\_\_\_\_  
N.J.P.E. #

\_\_\_\_\_  
Type or Print Name of Engineering Firm